

Green Proving Ground Test Bed Project

Technology Fact Sheet

Category:

Policy

Technology Name:

Net Metering

What is this Policy?

Even though overall, the electric consumption of GSA's buildings with photovoltaic (PV) arrays exceed the amount of electricity generated by their PV systems, the imbalances between time of generation and time of demand means that a substantial amount of electricity is returned to the utilities. This project will evaluate Net Metering versus registering a building as a Qualified Facility with the Federal Energy Regulatory Commission (FERC). The intent is to optimize how GSA locates, sizes, and funds future renewable energy systems.

Why is GSA interested?

Net Metering vs. Qualified Facility (QF) - There is significant variance in how "net" is defined as it relates to tariffs. Some utilities net against monthly consumption while others net monthly with a rollover practice, up to an annual limitation. In most states, over-generation - generation above the limit of a net threshold - is considered free power to the utility. If a site registers as a QF, the utility is required to purchase all excess energy, typically at the avoided energy rate. Avoided rates are very low, which is why net metering policies are often financially more favorable. Excess energy sold to the grid, however, is classified as any energy. Therefore, the site still has control of the renewable energy credits (RECs). Given this provision, in cases where the net threshold is exceeded, a QF strategy may be beneficial to GSA.

Net-Zero Environmental Footprint - Optimizing GSA's strategy for technology selection, site selection, capacity sizing, and operating strategies will allow GSA to achieve even more effective deployment of renewable energy at the agency-wide level with limited financial resources. The focus of this Test Bed project is on improving the overall rate of return while using the value of the excess RECs to fund further enhancements toward sustainability goals.

Geographic Distribution - This policy strives to balance investment across GSA facilities that are spread across a wide range of operating environments.

Applicability - This policy is intended to maximize financial benefit from renewable energy systems across GSA's national portfolio.

Adapted from report by Pacific Northwest National Laboratory